

Opportunity Title: USDA-FS Summer Forest Health Research Opportunity Reference Code: USDA-FS-SRS-2025-0015

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-FS-SRS-2025-0015

How to Apply To submit your application, scroll to the bottom of this opportunity and click APPLY.

A complete application consists of:

- An application
- Transcript(s) For this opportunity, an unofficial transcript or copy of
  the student academic records printed by the applicant or by academic
  advisors from internal institution systems may be submitted.
   Click here for detailed information about acceptable transcripts.
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional recommendations. At least one recommendation must be submitted in order for the mentor to view your application.

All documents must be in English or include an official English translation.

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Application Deadline 3/21/2025 3:00:00 PM Eastern Time Zone

Description \*Applications will be reviewed on a rolling-basis.

USDA Forest Service Office/Lab and Location: A fellowship opportunity is available with the US Department of Agriculture (USDA) Forest Service (FS) within the Forest Service Southern Research Station (SRS), at SRS-4160's FHC Lab on the University of Kentucky campus located in Lexington, Kentucky.

At the heart of the USDA Forest Service's mission is their purpose. Everything they do is intended to help sustain forests and grasslands for present and future generations. Why? Because their stewardship work supports nature in sustaining life. This is the purpose that drives the agency's mission and motivates their work across the agency. It's been there from the agency's very beginning, and it still drives them. To advance the mission and serve their purpose, the USDA Forest Service balances the short and long-term needs of people and nature by: working in collaboration with communities and our partners; providing access to resources and experiences that promote economic, ecological, and social vitality; connecting people to the land and one another; and delivering world-class science, technology and land management.

The Southern Research Station (SRS) operates laboratories and experimental forest across the southern US from Texas to Virgina, including the Forest Health Center (FHC) laboratory at the University Kentucky,





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Lexington, KY. The Southern Region (aka, Region 8) of the Forest Service manages national forests across the same area, including the Daniel Boone National Forest in eastern Kentucky. The office will be at the FHC Lab (Lexington, KY) with research being conducted at the lab, nearby greenhouse facility, the state tree nursery near West Liberty, KY, and a collaborator's field site near Loretto, KY.

Research Project: The USDA Forest Service's Southern Research (SRS) seeks an ORISE Fellow (<a href="https://orise.orau.gov/science-education/internships-scholarships-fellowships">https://orise.orau.gov/science-education/internships-scholarships-fellowships</a>) with knowledge of tree biology for a project to help in the conservation and restoration of white oak (<a href="Quercus alba">Quercus alba</a>). In conjunction with SRS's Southern Institute of Forest Genetics (SIFG) and state and industry cooperators, SRS-4160 is supporting research studying the development of genetic resources for white oak. This information will help the Forest Service and cooperating state agencies with efforts to conserve and regenerate white oak across the central hardwoods region. The intern will join a team of collaborating scientists, technicians, and graduate students using a range of resources to evaluate elements of white oak growth and development, including physiological measurements and molecular genetic analyses.

Learning Objectives: The participant will be a part of an interdisciplinary team studying tree pathogens and the diseases they cause on trees and in forests. Under the direction of a mentor, they will take part in selecting research questions and developing experimental and analytical approaches to answer the questions. The participant will take an active learning role gaining experience in the project by collecting and analyzing plant tissue and fungal samples and communicating results to team members. Specific learning objectives will include:

- Collect plant tissue and fungal samples in the field and properly label them.
- · Prepare samples in the lab, including DNA isolation, for analysis, and
- Analyze prepared samples and collect data as directed by the mentor.

**Mentor:** The mentor for this opportunity is Dana Nelson (<a href="mailto:charles.d.nelson@usda.gov">charles.d.nelson@usda.gov</a>). If you have questions about the nature of the research, please contact the mentor.

**Anticipated Appointment Start Date: June 2025.** Start date is flexible and will depend on a variety of factors.

**Appointment Length:** The appointment will initially be for three months but may be extended upon recommendation of USDA Forest Service and is contingent on the availability of funds.

Level of Participation: The appointment is full time.

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience. Some funding will be available to reimburse travel-related expenses to assist in field work and to



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participate in academic developmental activities.

Citizenship Requirements: This opportunity is available to U.S. citizens only.

ORISE Information: This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and USDA Forest Service. Participants do not become employees of USDA, USDA Forest Service, DOE or the program administrator, and there are no employmentrelated benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

Questions: Please visit our Program Website. After reading, if you have additional questions about the application process please email ORISE.USFS.SRS@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should be currently pursuing or have received an associate's or bachelor's degree in the one of the relevant fields. Degree must have been received within the past one year and three months, or anticipated to be received by 5/29/2026.

## Preferred skills:

- Academic training in areas such as dendrology, tree biology (horticulture, physiology, genetics) and ecology (silviculture),
- · Good quantitative analysis skills, particularly in terms of data collection, and
- · Interest in participating in interdisciplinary, team-based research projects to facilitate white oak regeneration.

The internship is for three months (summer 2025), but additional time is possible depending on available funding. The stipend rate will be competitive and based on the intern's academic and employment background. Some funding will be available to reimburse travel-related expenses to assist in field work and to participate in academic developmental activities. The anticipated start date is June 1, 2025. The anticipated duty station is at SRS-4160's FHC Lab on the University of Kentucky campus in Lexington, KY.

## Point of Contact Justina

- Eligibility Citizenship: U.S. Citizen Only
- Requirements Degree: Associate's Degree or Bachelor's Degree received within the last 15 months or anticipated to be received by 5/31/2026 12:00:00 AM.
  - Minimum Overall GPA: 3.00
  - · Discipline(s):
    - Environmental and Marine Sciences (<u>5</u>
    - Life Health and Medical Sciences (6 )



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